REMARKS

Claims 1-9 remain pending herein. Claims 3, 4 and 6 have been amended hereby.

This Preliminary Amendment is submitted to eliminate multiply dependent claims from the above-identified application.

Examination of this application on its merits is respectfully requested.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.

January 25, 2002
Date

Charles A. Wendel
Registration No. 24,453

Attachment:
Mark Up of Amended Claims

CAW/ame

Attorney Docket No. SCHN:016

PARKHURST & WENDEL, L.L.P.
1421 Prince Street, Suite 210
Alexandria, Virginia 22314-2805
Telephone: (703) 739-0220

composed of a character string chosen by the application program designer, so that a structured type object can be made to correspond with the symbolic variable (100), and a second field (102) composed of an identification of an element of the structured type object associated with the symbolic variable (100).

3. Programming process according to claim 1~~ or 2~~, characterized in that the replacement step comprises:

- a step (34) to search for the relative address defined for each structured type element in a table (1.1, 1.2) of elements of a structured type object stored on the programming station,

- a step (32) to search in a configuration table for the physical location declared for each module that the designer has associated with symbolic input-output variables (100) of the application program,

- a step (33, 35) to construct the exact topological address of each symbolic variable (100) of the application program, using interpretation means on the programming station, starting from the relative address and the physical location found.

4. Programming process according to claim 1~~ or 2~~, characterized in that the step to define structured type objects comprises a step to create a table (1.1, 1.2) of structured type object elements comprising a first column containing at least one identification of a characteristic data of the structured type object, a second column containing the elementary data type (EDT) and a third column containing the relative address of the data, and then memorizing this table in portable memory means, for each structured type object.

5. Programming process according to claim 3, characterized in that the table (1.1, 1.2) of structured object type elements comprises a fourth column containing a description of the data, and a fifth column containing read or write rights for each data.

6. Programming process according to ~~any one of claims 1 to 5~~ claim 1, characterized in that the process comprises a step to configure input-output modules comprising a step to select a commercial reference of an input-output module, and assignment of the selected input-output module to a determined physical location, the interpretation step then including a step to check that the input-output module selected at a determined physical location is compatible with the structured type object configured at the same physical location.

7. Programming station for programming automation equipment comprising means of memorization and display, and means of interaction with a designer of an automation application program (10), characterized in that the programming station comprises an editor of symbolic variables (100) to generate a configuration table (6) stored on the memory means, the programming station also includes several tables (1.1, 1.2) of structured type object elements stored on the memory means, and means of interpreting an application program (10) comprising at least one symbolic variable (100) defined by the designer using the editor.

8. Programming station according to claim 7, characterized in that it comprises means of compiling the application program interpreted by interpretation means to transform the interpreted application program